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AUTHOR Hurwitz, Donald
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ABSTRACT

The basic arrangements and practices of American broadcast audience research and measurement were established during the first decade (1920-29) of the field's existence, and were motivated by commercial and competing institutional concerns within the broader context of evolving forms of imagination and expression. A review of the evidence found in early journals and industry promotion pieces reveals three stages in the development of audience research and measurement. Initial attempts consisted of piecemeal tallies by broadcasters who sought to register the country's growing fascination with radio. The tallies were superseded by more formal and extensive research efforts once the networks and academicians began to employ research as a device to promote radio and their standing among its users. At that point, concerned with protecting their own positions in the fledgling industry, advertisers supported the formation of the Cooperative Analysis of Broadcasting (CAB), radio's first "rating" service. Although stability in the relations among advertisers, broadcasters, and researchers was not achieved until the 1940s, the activities and commitments of the CAB served both to confirm audience research in its role as the central symbolic template of broadcast advertising and to define the issues that animated the development of the field. (FL)

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AUDIENCE RESEARCH IN AMERICAN BROADCASTING:

The Early Years

by

Donald Hurwitz

Dept. of Communication
Boston College
Chestnut Hill, MA 02167

Presented to the History Division at the Association for Education in Journalism and Mass Communication Annual Convention in Corvallis, Oregon, August 1983. Not to be quoted without the written permission of the author.

CS 207 607

AUDIENCE RESEARCH IN AMERICAN BROADCASTING: THE EARLY YEARS

Donald Hurwitz
Assistant Professor
Department of Communication
Boston College
Chestnut Hill, MA 02167

ABSTRACT

This paper explores the emergence of audience research and measurement in American broadcasting. It argues that the basic arrangements and practices of broadcast audience research were established during the first decade of the field's existence, and that they were motivated by commercial and competing institutional concerns operating within the broader context of evolving scientific forms of imagination and expression.

Three stages in the development of audience research and measurement are identified based on evidence found in early trade journals and industry promotion-pieces. Initial attempts to fathom the audience consisted of piecemeal tallies by early broadcasters, who sought to register the country's growing fascination with the new medium. The tallies were superseded by more formal and extensive research efforts once the networks and members of the academy began to employ research as a device to promote radio and their standing among its users. At that point, concerned to protect their own position in the fledgling enterprise, advertisers supported the formation of the Cooperative Analysis of Broadcasting--radio's first "rating" service.

The circumstances, implications, and major responses surrounding the establishment of the C.A.B. are reviewed in some detail. Although real stability in the relations between advertisers, broadcasters, and researchers was not achieved for another twenty years, the paper concludes that the activities and commitments of this early radio-rating organization served both to confirm audience research in its role as the central symbolic template of broadcast advertising and to define the issues that animated the further development of the field.

Presented to the History Division at the Association for Education in Journalism and Mass Communication Annual Convention in Corvallis, Oregon, August 1983.

The American radio audience was fundamentally unseen and therefore unknown throughout the better part of the 1920s. Lacking a perceptual apparatus that could capture it, early celebrants of the radio-audience phenomenon exercised their penchant for hyperbole to discuss it. The new media form was heralded in popular journals of the time in numerous articles with titles like "Radio Converts the Continent into an Auditorium" and "The Great Audience Invisible," and the audience itself was described as resembling "glittering fireflies in a sea of darkness."[1] As the contours of an industry emerged alongside such rapturous phrases, however, initiatives abounded to cast the imagined audience into ever more concrete terms.

It is curious that these initiatives have received so little systematic attention. Audience research has been instrumental to the development, rationalization, and defense of broadcasting and the media industries generally, and it has had significant impact over the years on the agendas of mass communication researchers as well.[2] Furthermore, the arrangements, uses, and consequences of audience research and measurement are today of increasing intellectual and pragmatic interest.[3] Yet it is difficult, at best, to find explorations of the sources, models, and suppliers of the broadcast audience research that informed the rise of television and the Nielsen Company as recently as the 1940s.[4]

This paper is part of a larger effort to stimulate discussion of these matters. It suggests that broadcast audience research arose from the piecemeal tallies of early broadcasters in their attempts to register the country's growing fascination with the new medium. The tallies were put to use shaping program offerings, checking carriage and signal strength, competing with the print media, and promoting radio to advertisers. Prompted by the medium's dramatic growth to better understand the dimensions of the radio phenomenon

and prodded by advertisers to concretize claims about the audience, broadcasters then made their research efforts more formal and extensive. Initiatives by the networks established something of a common research framework, and the involvement of members of the academy supplied it with scientific legitimacy. At this point, concerned to protect their own position in the fledgling enterprise, advertisers supported the formation of the Cooperative Analysis of Broadcasting. Although the relations between advertisers, broadcasters, and researchers did not achieve real stability for another twenty years, the activities and commitments of this early radio-rating organization helped to establish many of the basic practices and assumptions of the broadcasting field.

I

The earliest attempts to concretize the audience were little more than speculative generalizations based on scattered radio manufacturers' and dealers' reports. By 1922--a year in which the radio phenomenon was described as a "craze"--such accounts suggested that one family in five hundred possessed a receiver. In four years the figure rose to one family in twenty, with estimates attributing four listeners to each set.[5] Propelled by their interest in selling radio receivers, local broadcasters sought guidance to discover how best to satisfy the wants of their patrons. Beyond discussing them with friends and acquaintances, they turned to those in the best position to know: the men on the other side of the microphone. In the words of one announcer:

> I am heard by millions of people from three to three thousand miles away. I know you are sitting in little farm houses or city apartments with head phones over your ears, standing by loudspeakers in the city, or massed in great concert halls . . . Yet we never see that vast audience, your massed faces, and you never see ours. We are voices out of the night . . .6

In just a few years, announcers were being called on regularly to comment publicly as to which types of programs were appropriate for the various hours of the broadcast day.[7]

Whatever understanding those most directly responsible attained of their audiences was supplied by the listeners themselves. In the early years of broadcasting, listener periodicals urged audiences to write to make their pleasure known and scolded them when they did not.[8] But the populace needed little in the way of threats or encouragement to write. Indeed, comment on the enormous quantities of mail received by broadcasters was an intrinsic element in the initial celebrations of the medium:

> . . . the announcer stated that in the one week following the organ dedication they had received more than seventeen thousand letters commending their programme--and the letters were still pouring in. . . . a tabulation showed that the letters came from every State in the Union, all the provinces of Canada, from Cuba, Mexico, Central America, and from hundreds of vessels on the Atlantic and Pacific.9

Labelled "radio's applause" by showpeople when broadcasting was still a novelty, audience mail soon persuaded broadcasters of the "gratitude" they claimed they could elicit on behalf of radio advertisers.

As the above example also illustrates, once broadcasters realized the multiple uses to which they could put fan mail they began to sort and count it. At first such efforts amounted to little more than simply tallying the thousands of cards and letters according to their state of origin. This served as a guide for stations and sponsors regarding their musical and variety selections and as further grist for the ongoing mills of broadcast promotion.[10] When advertisers and their agencies began to program radio time in earnest, though, they attempted to go beyond postmarks to explore the character and contents of letters from listeners; they examined such things as grammar and paper quality in an apparent attempt to learn more about the

nature of the audience. During the Depression, advertisers extended these efforts to the construction of program categories according to the amounts of mail different types of shows could be expected to elicit, and they established relationships between formal program elements and various types of letter writers.[11] All of this was used to offer more and more of those shows that guaranteed a large mail response.

The statistical manipulations applied to this index of audience response posed one difficulty. Fan mail had begun to slacken by the late 1920s, just as advertisers and their agencies were learning not only to count it, but to rely on it as a form of guidance and a primary measure of success. Not to be undone, sponsors and agents began to stimulate the flow of mail with giveaways, contests, souvenirs, and the like. While these initially aroused interest in shows, by 1932 fully one-third of the companies advertising on the air were offering inducements to audiences. It did not require much in the way of scientific sophistication to realize that this compromised the meaningfulness of audience mail response. Indeed, complaints began to surface among broadcasters. Letters came only from certain segments of the audience, they said, and particular listener groups were sometimes just not letter writers. Furthermore, the networks found it burdensome to answer so much mail. Lowell Thomas even went so far as to publish a book that typed and caricatured the gamut of letter writers.[12] Fan mail thus was understood sufficiently by the early 1930s to be derided as an unreliable measure that could be used to prove anything.

Another strand in the development of broadcast audience research which overlapped the use of fan mail was the attempt to literally map and count the number of radio listeners. Such information was sought for a variety of purposes. One was that the allocation plan conceived by the Federal Radio

Commission required checks on the clarity of reception and signal interference. Another was that some broadcasters were interested in comparing themselves to the print media. Most important of all, however, the advertising community was beginning to seek specific guides for media choice and vehicle selection. This last point usually was registered as a criticism of existing broadcast practices by advertisers and agents:

> The purchaser of time today is guided by miscellaneous evidence . . . Personal opinion, the results of too few national surveys, popularity contests, previous experience and plain faith are among the indices used at present. The vast majority of information, near information and misinformation now dangling before the advertiser's eyes has yet to be scientifically unravelled.13

The earliest efforts along these lines attempted to map the geography of radio listening by means of engineering surveys. Based on such factors as antenna height and location, transmission power, wavelength, and such, the surveys offered theoretical measurements of the potential coverage of radio signals. If the number of people within their geographical coverage areas could be determined, broadcasters could go on to compute their potential audiences. So they factored receiver sales figures and fan mail into the picture. These were then superseded by mail surveys, which finally allowed broadcasters to exert some control over the information they were collecting. The results permitted them to approximate what was alternately referred to as their "actual coverage," their "audience," and their "circulation." One study, for example, was introduced in the following terms:

> While there have been numerous estimates based on power, field strength tests and accumulated "fan mail" to show where a given station can be heard, there has been a dearth of factual information relative to the actual listening audience of a station.
>
> Although we are unable to determine the actual number of listeners at a given moment to any station, since this shifts with every program, this study has enabled us to locate and grade by degrees of intensity the listening area of each station.14

Although broadcasters claimed such information was comparable to that offered by newspapers, it still did not prove satisfactory. This was due partly to the obvious differences between broadcasting and print media and to the relative abstractness of the measurement problem in broadcasting.[15] Indeed, the initial focus of the field was restricted to the spatial dimension of broadcasting: mail surveys were used only as a check against engineering field-strength maps at first, it being assumed that listeners simply selected the strongest signal available to them. But it was known that this was changing and that the times demanded more and better media information. Among broadcasters, there was a sense that the audience was growing at the rate of fifty percent through the thirties and station owners needed facts in order to cash in on the trends.[16] They thus held fast to a vision staked out earlier that organized the handful of research possibilities available to them. As the vision was expressed in an article in the trade literature:

> Knowing the effective area of a station, we can determine the potential audience; establishing a percentage rating of station popularity gives the approximate average audience; by determining listener habits . . . we can establish the probable audience at a given time; and finally . . . we can design the program best suited to produce a favorable response for a given product.17

This was coupled with the sense among larger broadcasters that, as time passed, the grace period allowed them by advertisers would expire. E. P. H. James later explained:

> newspapers and the magazines "grew up" in advertising at the same time as the clients and the agencies who made use of their pages. . . . When radio stations first began to sell time they found that advertisers and agencies had become accustomed to demand circulation facts, certain standards of service and certain guarantees from an advertising medium. Since it was manifestly impossible to meet these requirements in the early stages of broadcast advertising, advertisers and agencies at first made allowance for the complete newness of the broadcasting business. They were willing to take a chance . . .
>
> But when the Depression descended upon us, advertisers and their

> agencies immediately began to check over their advertising expenditures and sought justification for every dollar spent. . . . Then, as now, there was a big demand for result stories--facts and figures to show the effectiveness of radio. There was also an insistent demand for coverage and circulation information . . . [18]

Advertisers and agencies were indeed on the advance during the period, and with them arose an increasingly scientific orientation. As their concern passed from radio's range to market areas and from the endurance of the medium to its best buys, they began to demand information regarding the audience for particular programs and commerical time periods. They were encouraged in this by the researchers from business schools and university departments of psychology who moved into their field during the late 1920s and early 1930s--men like Paul Cherington at J. Walter Thompson, George Gallup at Young & Rubicam, Percival White and Daniel Starch in their own research firms. What the researchers offered, particularly as they were absorbed into the world of advertising agencies, was an all-encompassing orientation that suggested they could coordinate supply and demand to bring about new market efficiencies. This was to be accomplished by a marriage of psychology with business statistics, which would enable agencies and researchers to bypass middlemen and to provide an "inventory of intangibles" directly linking advertisers with consumers.[19]

Dividing their time between basic methodological work and substantive contributions to the advertising field, the researchers focused interest on the attention value of advertisements and the need to distinguish advertising from sales measures.[20] Agencies then took up such efforts and popularized the comprehensive new orientation they offered. They also used the orientation itself to cast the Depression as something of a cleansing. As one advertising periodical presented it, "1931 was a year when business executives

began to cast about for new facts to challenge traditional methods. Their startling interest . . . is evidence of the newer, scientific attitude that is the Depression's contribution to greater economic achievements."[21]

The interest in scientific advertising and broadcast research was buttressed by the initiatives of the U.S. Census Bureau. In the 1920s the Bureau had begun to branch out significantly beyond gathering population data, and it acknowledged the centrality of business by investigating production, distribution, markets, advertising, and media. These investigations escalated during the 1930s, when such information was sought to form part of the basis for legislation directed toward stabilizing the social and economic system. Broadcast advertisers recognized the possibilities of such activities fairly early, though with ambivalent reactions. One argued:

> To ascertain how many of the radio audience actually listen in on a particular advertising broadcast is not only impossible but relatively unimportant. . . . However, until more scientific data on radio stations is available, the only means by which circulation of . . . stations can be determined is through a listener census. . . . This census would have to be nationwide, almost continuous, and be entered into by a relatively large percentage of the population . . .
>
> The cost of maintaining such a service would be all out of proportion to its usefulness.22

Following the release of the decennial census in 1931, however, broadcast advertisers became obsessed with taking their own measure. Census findings were used to refine the earlier mapping efforts, and the census model itself seemed increasingly appealing. When the Bureau undertook to ascertain the full extent and character of the field in 1935, a veritable research machine stood ready to interpret the results.

By this time the networks had gotten involved to lend a national orientation to broadcast research. In 1928, NBC commissioned a large-scale study of the radio audience from Dr. Daniel Starch. Based on 18,000

interviews conducted during 1928 and 1929, Starch presented data on the geography of radio ownership, popular program-types, and the economic status of listeners. Yet, interestingly, the Starch report was not perceived as opening any new lines of inquiry withing the field, despite the fact that it was the first major undertaking of its kind. Rather, it was said to confirm what was already known about the radio audience, but now in "scientific" terms as against the speculations previously drawn upon.[23] Indeed, subsequent NBC promotion simply wedded the new style to traditional testimonials, as in a 1929 piece entitled "Broadcast Advertising," which reprinted success stories and audience size estimates culled from advertisers' files and RCA's dealer network.

Also in 1929, CBS initiated an annual series of surveys of station popularity that adopted the perspective of the national advertiser. The studies were simple in design and executed by Price, Waterhouse & Company, an accounting firm with unimpeachable credentials. Though programming with only one-third the revenues of NBC, CBS demonstrated its stations to be more popular through the magic of the "population differential." This was established by crediting the entire population of every city to that station which was the first choice among three competing network stations by a margin of five percent. While the population differential was largely discredited in the trade press,[24] the interest it generated was capitalized on in 1931 with the publication of "Does Radio Sell Goods?" Conducted by Dr. R. F. Elder, of the Massachusetts Institute of Technology, by means of 15,000 questionnaires mailed to a variety of cities, the study purported to show the actual increased use of radio-advertised products in radio versus non-radio homes and tied-in the results with amount-of-listening. The response to this effort was both positive and dramatic, and it led to a

steady stream of research reports from the networks.[25]

Few of these reports were technically innovative. Relying on statistical presentations to flesh out the picture of radio's growth and use, they offered extensions of earlier research approaches or reinterpretations of data collected by others.[26] They did serve, however, to establish an image of credibility for broadcasters with the advertising agencies. And their further effect was to encourage a variety of broadcast-related metropolitan surveys that demonstrated the penetration of radio into geographic locations, demographic groups, and seasonal habits, and the remarkable uniformity of listening habits across American cities.[27] Together, such efforts stimulated a rising tide of broadcast audience research and raised a series of research disputes. These concerned the importance of coverage versus circulation measures, the uses of engineering maps versus social surveys and controlled field studies, and the role of stations versus programs in determining listening. Interest gradually shifted toward the latter alternative in each of these areas, carried along by a burgeoning broadcast-advertising audience-research community.

As the Elder study also suggests, one final group of researchers who appeared on the scene during this period consisted of members of university faculties. Interested in building bridges by which the academy could serve the community, they adopted a helpful and sensible, public-spirited stance. In the words of Professor Frederick Lumley, of Ohio State University, whose book offered the most complete compendium of early broadcast-research studies:

> It is the purpose of this book to discuss and evaluate these assurances which radio performers desire and to suggest means of rendering the approval and disapproval of the listener audible to the broadcaster . . . This report . . . shows how broadcasting investigators have attempted to discover what programs appeal to listeners, what ones they actually hear, when they find time to listen, how

> much listening they do, and, most important of all, how radio affects their daily lives. From such information the character of the influence of radio can be judged and intelligent steps may be taken to mold it.28

But academic researchers were pragmatic as well. Professor Lumley continued:

> In discussing the value of and need for measurement, it must be realized that the most suitable measures are not necessarily the most scientific. There are two facts which control the measurements needed in any particular case. In the first place, a rough measurement may reveal all that is desired, and, in the second place, the cost of the information may be an important consideration. Any appraisal of survey methods must be made in terms of the usefulness of information and the cost of securing it. Otherwise, the value of the survey has no meaning.29

University researchers initially served to make knowledge of the radio audience available to smaller broadcasters as well as larger ones; to curb the abuses of research by elaborating, formalizing, and systematizing its methods; and to confer scientific and general public legitimacy on the audience-research enterprise. Seeking an ongoing role for themselves in the expanding industry, however, academic researchers interested in the social psychology of listeners quickly fell in step behind the emerging broadcast-advertising concern to find new ways to count them. This in turn led to the increasing involvement of university researchers with matters of methodology. Whereas the teens and twenties had witnessed the flowering of basic survey techniques, the 1930s saw their extension into varied use of the telephone, the invention of indirect meter measures of broadcasting, and the like.

The interests and orientations of showpeople, business people, and social scientists thus began to converge in the arena of radio and its audience about 1930. But the convergence was not without tensions, particularly between broadcasters and advertisers. Indeed, the very success of the networks in advancing the cause and uses of large-scale audience research precipitated developments that threatened to usurp whatever power broadcasters

had retained in their flourishing relationship with the advertising community. One result was that, in both spheres of influence, fathoming the audience became a matter of counting it.

II

The tensions among the leading purveyors in the institutional order took shape over the issue of the control of knowledge about the radio medium and its audience. While determining the number of receiving sets in existence was a reasonably straightforward matter, understanding the listening phenomenon was not. This had been the subject of speculation, amateur science, and a variety of accounting and research procedures since the early days of radio and had given rise to all manner of claims about its reach and impact. In the larger context of business as its practices developed through the Depression, however, and of advertising as it sought to meet the subsequent challenges, such approaches were no longer enough to satisfy the buyers of broadcast time. Although the networks' embrace of a scientific business orientation curried favor with the ascendant groups in broadcast advertising, it also escalated the specific importance of questions about listening habits and audience preferences. Advertisers, in order to assuage their uncertainties in this domain, turned to Archibald Crossley and supported the establishment of his Cooperative Analysis of Broadcasting, which had as its purpose to provide just such information on an ongoing basis exclusively for their own use.

Crossley had gotten involved in advertising and marketing research as early as 1918, near its inception. While still a young man, in 1926, he founded Crossley, Inc., to undertake such work on a contract basis. One of his first jobs was to check the carriage of specific network programs by

affiliated stations on behalf of their commercial sponsors. What he found was a significant incidence of double billing--the substitution of one program or commercial announcement for another, usually local for national, and the subsequent billing of both advertisers for the time. During this period, too, Crossley met John Karol, one of his part-time field investigators, whom he hired to manage his New York office in 1929.[30]

In 1930 Crossley published Watch Your Selling Dollar, a book which in broad brush strokes both justified and promoted the research endeavor.[31] In it he argued that while advertising had increased sales and aided distribution, distribution costs had come to account for two-thirds of all the costs of selling. The remedy suggested, of course, was research. Research could help to standardize and simplify the tasks of advertising and distribution, Crossley claimed, thereby eliminating waste and increasing profits.

The roots of Crossley's expansion into the Cooperative Analysis of Broadcasting lie first in his radio-checking activities.[32] Having successfully performed a few such studies for the clients of S. H. Giellerup at the Frank Seaman advertising agency, Crossley proposed that in the future he investigate listenership rather than reception. After establishing that most radio owners also had telephones, he began calling around to find out just who listened to radio and to the station and program of his client. As more advertisers began to solicit such information from him, he began to log his telephone calls to produce a more general picture of the radio audience.

At this point Giellerup publicly proposed the extension of such a service to cover all of radio:

> Broadcasting has now existed long enough to satisfy the most skeptical that it is going to be permanent. Furthermore, it has thrived sufficiently under the present system to justify the prediction that advertisers will continue to foot the bill . . . Radio today is just as thoroughly an advertising medium as the

> newspaper, the magazine, the car-card or the billboard.
>
> But as an advertising medium radio differs radically in one respect. The newspaper and magazine tell you how many copies they sell and if you question their veracity they can furnish proof . . . You can be reasonably sure of how many people the audience consists of and, in addition, just where these people live . . .
>
> My proposal is a census of radio listeners. A periodical check-up on the tuning habits of set owners.33

Giellerup was concerned with the efficiency of advertising plans and broadcast operations. He was also aware of radio's distinct difference from the print media: the popularity of programs involved more than the power and proximity of their transmitting stations because the radio receiver was a multiple distribution device. Giellerup and his clients thus went on to introduce Crossley's people to the radio committee of the Association of National Advertisers.

The A.N.A.--which included three hundred of the largest national advertisers and claimed credit as the only surviving co-founder of the Audit Bureau of Circulations--provided the definitive impetus to the formation of the C.A.B. In 1928 it had published What About Radio Advertising?, which reviewed for its members the scant information then available about the medium. The book's opening comment was this:

> We anticipate that the report will be interesting, not because it will enable our members to decide the question, "What about radio advertising?" but because it may point the way toward questions to be asked before the medium is employed. . . . we felt that at this time a further examination of experiences would not materially contibute toward the answer to the basic question. . . 34

The report went on to state that success stories might be useful in deciding how to broadcast, but the determination of whether to employ the radio medium depended on facts not yet gathered from the listeners themselves. The Association was therefore understandably excited when it learned of Crossley's

work, and it dispatched Al Lehman to work with John Karol, of Crossley, Inc., to produce a thorough research review of the medium during 1929 and 1930.

The result was The Advertiser Looks at Radio, a compilation of broadcast research studies that sought to aid the buyers of radio time by presenting accurate and conservative, if spotty, information on both the audience and its favorite programs. The report inquired into such matters as radio's potential and tuned audience, program goodwill and improvements, sales results, network reliability, the efficiency of station line-ups, and the character of the audience, and it produced some general guidelines for use by radio's sponsors.[35] It was accompanied by a proposal to undertake a large-scale original study on a one-year experimental basis.

Broadcasters reacted to this initiative with alarm. Not only would it provide their clients with more information about radio than they themselves possessed, but it would place control over the information in the advertisers' hands as well. The editor of Broadcast Advertising commented:

> If you are fond of diagrams and charts and plans and lists and all the other paraphernalia of the statistician, then you will enjoy the . . . report of Crossley, Inc. . . . If, however, you really want to find out something definite about the advertising end of radio you will probably be disappointed. The plan and purpose of the survey are excellent, but the execution seems extraordinarily inefficient.36

Of course, broadcasters' hands were tied somewhat by the directions their own development and promotion efforts had taken. Despite the ironies of their position, however, they criticized the more scientific aspects of Crossley's work by objecting to his sample size, declaiming his national urban bias, and so forth. In this period, too, NBC hired its first full-time statistician, and CBS moved to shore up its own resources by hiring Karol away from Crossley and undertaking comparable studies of its own.

The A.N.A.-Crossley effort moved ahead apace, though, with the incorporation

of the Cooperative Analysis of Broadcasting in March, 1930, under a governing committee of advertisers and an advisory committee of agency people, with the actual work performed by Crossley, Inc. Endorsement by the A.N.A. helped to enlist forty-nine subscribers at $60-70 a month, which allowed Crossley, Inc., to show a small profit upon the release of its first comprehensive report in June, 1930. The Invisible Audience was intended to be of immediate and specific use to its advertiser-clients, so it concerned itself with the relative numerical standing of their programs and the stations over which they were broadcast. The report also included a section of familiar comments from participants regarding the effectiveness of the medium for their purposes. But as the number of advertisers already on the air delimited the general publicity value of a program, the report's eye-catching features were the popularity "ratings" provided for each subscriber's show and radio's "Top 10."

The survey was immediately made continuing in nature, and in a short time it became an important reference tool for broadcast advertisers and an effective counter to the claims of broadcasting's more extravagant promoters. The method Crossley, Inc., employed was the telephone recall. Listeners were interviewed by phone about their previous day's listening and asked when their sets were in use, who listened, what programs they listened to, and what stations. This was done every day for two weeks each month across forty cities. Every month, every four months, and every year the many thousands of phone calls were cumulated in reports of audience levels and station and program rankings.[37] Statistical validity, it was claimed, was achieved by comparing the monthly reports for consistency. And the overall endeavor was said to provide for radio a functional equivalent to the Audit Bureau of Circulations.

Although the C.A.B.'s primary effort was devoted to the production of

tables and charts showing listening variance by season, day, hour, family income, place of residence, program, and station, the organization also continued to offer counsel to advertisers. Challenging the traditional emphasis on the appropriateness of the product advertised to the medium, it focused interest instead on the developing selectivity of audience listening. It suggested that programs find and build their audiences over time within the specific limits of those listeners available at a given hour, and it stressed the quality of a program as the key to its success. By casting such research-based findings in the form of traditional business advice, the C.A.B. bridged the various approaches that had been developed to understand broadcast advertising and the audience. This served to establish a common ground among the field's protagonists and to unite its older guard with its newer one. As testimony to the success of this endeavor, in 1934 the C.A.B. moved toward true cooperative status by enlarging its governing committee to include representatives of the American Association of Advertising Agencies (representatives of the National Association of Broadcasters were added in 1935) and by ploughing profits back into expansion.

During its early years, research in broadcasting was greeted with mixed reactions. Stimulated at first by the flood of mail broadcasters received from listeners, initial attempts to calculate the audience were dismissed as "equivalent to determining the number of crickets chirping at any instant in a swamp on a foggy evening."[38] A cross-country tour by NBC showman John Royal confirmed this sense and suggested that the social, psychological, and cultural differences found across the land made it impossible for broadcasters to please everyone with any sort of standardized program fare.[39] As this local, particularist viewpoint was expressed as late as 1932, after it had

clearly begun its decline:

> Modern times have added another to that list of ridiculous questions such as "How old is Ann?" and "How high is up?"
>
> It is: "How big is a radio audience?" and the answer pretty generally seems to be "That was no lady; that was the Four Marx Brothers" . . .
>
> Statisticians, mathematicians and persons who should know better from Maine to California have . . . worn out slide-rules, adding machines and tempers trying to put a finger on some definite measuring stick which would permit the affixing of an Audit Bureau of Circulation stamp on this will-o'-the-wisp the number of listeners to a given program . . . 40

Once set counts had determined the potential audience for broadcasting, however, it appears it was only a matter of time before broadcast promoters, advertisers, the Census Bureau, commercial researchers, and academicians moved beyond the early radio-mapping efforts to explore the dimensions of the universe of radio listeners.

By the late 1920s, it was not information or an image of the audience that broadcasters and advertisers lacked, but an internal consistency of understanding and interpretation. The parameters provided by researchers were taken from their Progressive conceptions and included a variety of ways to group listeners: by sex, occupation, education, sports interests, political and religious affiliations, and the like. Broadcasters and advertisers then discovered that, by assuming listeners were active and devising programs to be understood by anyone with the mentality of a twelve- to fifteen-year-old, they could identify segments of the audience according to program-preferences and bunch different groups to produce remarkably large listenership tallies.[41] As anxieties escalated during the Depression, this enterprise was carried to ever greater extremes and research was used to enumerate the increasingly abstract and fluid audience, thereby making it appear fixed and static. In the hourly pursuit of the modal audience, programs came to be constructed for

continuous, universal appeal.

The rise of Archibald Crossley and the Cooperative Analysis of Broadcasting in these circumstances underlines the fluidity of the relationships that stood at the center of broadcasting in its formative years. It reveals, too, the rapidity with which the young industry adopted the outlook and concerns of the advertising community and became a harbinger of new advertising styles. This is not to deny that many broadcast showpeople resisted what they perceived as the alien tyranny of statistical indices, regardless of their source.[42] But the C.A.B., by supplying sponsors with such information, set out the blueprint around which negotiations were organized between broadcast buyers, sellers, talent, and researchers. This, in turn, secured the role of an independent national research organization in broadcast advertising and formalized and extended the presence of particular types, formats, and uses of research.

Thus the basic arrangements and conceptions that underpin the use of broadcast-advertising audience research were established during the first decade of the field's existence. What began as a series of more or less interesting and well-intentioned attempts to fathom the mass audience was quickly superseded by the quest for accurate, precise measures in support of commercial and competing institutional maneuvers for control. Ultimately, the quality of the broadcast experience was equated with its popularity, and the anonymity research imposed on the audience was used as a device to craft its uniformity (and so to increase it). In the course of these developments, scientific discourse was established as the central symbolic template of the field, linking the interests of its various participants and serving as their primary guide to action, explanation, and legitimation. Although the C.A.B.'s method, style, and influence were later challenged and displaced, the role it

won for audience research was only amplified and elevated. Indeed, the jockeying for position that followed the rise of radio's first rating organization insured that researchers would play an increasingly important part in fixing the meaning of the practice of broadcasting and in gauging its overall success.

NOTES

[1]Literary Digest, 4 December 1926, p. 26; O. E. McMeans, Scribner's, April 1923, p. 410; Orrin E. Dunlap, Jr., Advertising by Radio (N.Y.: Ronald Press, 1929), ch. 4.

[2]These points have been most fully acknowledged and explored in the British literature on mass communication. See, e.g., Asa Briggs, "Prediction and Control: Historical Perspectives," in Sociological Review Monographs 13, ed. Paul Halmos (Keele, Staffordshire, Great Britain: U. of Keele, 1969); Roger L. Brown, "Approaches to the Historical Development of Mass Media Studies," in Media Sociology: a Reader, ed. Jeremy Tunstall (Urbana, Il.: U. of Illinois Press, 1970); Denis McQuail, ed., Sociology of Mass Communications (Harmondsworth, Middlesex, Great Britain: Penguin,1972). A recent American contribution that addresses the related tradition of TV violence studies is Willard D. Rowland, Jr., The Politics of TV Violence: Policy Uses of Communication Research (Beverly Hills, Cal.: Sage, 1983). One that explores the connections between mass communication effects and the development of the behavioral sciences is Shearon Lowery and Melvin L. DeFleur, Milestones in Mass Communication Research: Media Effects (N.Y.: Longman, 1983).

[3]In addition to the two American examples cited in footnote 2, see the interpretation of audience research put forth in Paul Klein, "The Men Who Run TV Aren't That Stupid...," New York, 25 January 1971, p. 20; as well as the interest in developing alternative audience-evaluation measures in public broadcasting evident in Carol A. V. Keegan, "Qualitative Audience Research in Public Television," Journal of Communication 30 (Summer 1980): 164. Also, the popular press regularly reports various calls for less stress on ratings, and the trade press has recently devoted a great deal of attention to audience-measurement issues regarding the new telecommunications technologies.

[4]While a handful of texts and histories of the field mention early broadcast audience research, they do so only in passing and present such information as a series of minor, accomplished facts. See, e.g., Sydney W. Head with Christopher H. Sterling, Broadcasting in America, 4th ed. (Boston: Houghton Mifflin, 1982); Eugene S. Foster, Understanding Broadcasting, 2nd ed. (Reading, Ma: Addison-Wesley, 1982); Erik Barnouw, The Sponsor: Notes on a Modern Potentate (N.Y.: Oxford U. Press, 1978); Christopher Sterling and John Kittross, Stay Tuned: A Concise History of American Broadcasting (Belmont, Cal: Wadsworth, 1978). A handful of doctoral dissertations do somewhat better by devoting an early chapter or two to the subject, though usually with a methodological emphasis. Among the most useful of such efforts are Philip D. Jursek, "An Analysis of Broadcast Audience Measurement: Recent Government Investigations and Methodology Research, with an Assessment of the Current State of the Art," (Ph.D. dissertation, Wayne State U., 1970); Lawrence Myers, Jr., "An Examination of Television Audience Measurement Methods and an Application of Sequential Analysis to the Television Interview Method," (Ph.D. dissertation, Syracuse U., 1956); Frank N. Stanton, "A Critique of Present Methods and a New Plan for Studying Radio Listening Behavior," (Ph.D. dissertation, Ohio State U., 1935).

[5]For a typical example among the multitude of such efforts, see "How Large is the Radio Audience," Wireless Age 10 (September 1923):23. The lack of reliability in these reports is made evident by the fact that this one worked up an estimate in answer to the question posed by the title by averaging other reported audience estimates. Limited confirmation of such estimates can be found scattered throughout the primary literature of the field. See, e.g., Paul Schubert, The Electric Word (N.Y.: Macmillan, 1928); Francis Chase, Jr., Sound and Fury (N.Y.: Harper & Bros., 1942); Llewellyn White, The American Radio (Chicago: U. of Chicago Press, 1947).

[6]Graham McNamee (with Robert G. Anderson), "Your're on the Air," Satevepost, 1 May 1926, p. 14.

[7]See, e.g., Magner White, "Somewhere There's Always Someone Listening In," America Magazine, March 1927, p. 34.

[8]See, e.g., "Taking the Listener to Task," Wireless Age 11 (October 1923):17; Hortense Lee, "The Woman Listens In," Wireless Age 11 (January 1924):30.

[9]McMeans, "Audience Invisible," pp. 410-11.

[10]See "Revising Schedule Brings One Thousand Complaints," Broadcast Advertising 2 (December 1929):6 [This journal will hereinafter be cited as BA]; WENR, "Station Survey," 15 March 1929, Broadcast Pioneers Library, Washington, D.C.

[11]See "Mail Response is 'Pulse' of Radio Audience," BA 4 (February 1932):34; Bernard Urist, "Evaluating Scripts," Advertising & Selling 17 (19 August 1931):50 [This journal will hereinafter be cited as A&S].

[12]For a compendium of these responses, see Edith Efron, "What They Do With Your Letters," in Television: A Selection of Readings from "TV Guide" Magazine, ed. Barry G. Cole (N.Y.: Free Press, 1970). On NBC's procedures for processing audience mail, see Michael J. Stanton, "A History of the Research and Planning Department of the National Broadcasting Company 1931-1976," (Ph.D. dissertation, Bowling Green State U., 1977). Thomas's book is titled Fan Mail (N.Y.: Dodge, 1935).

[13]Charles F. Gannon, "Selecting the Station List," p. 55, in The Advertising Agency Looks at Radio, ed. Neville O'Neill (N.Y.: D. Appleton, 1932).

[14]John Karol, "A New Yardstick for Measuring Radio Coverage," BA 4 (April 1931):8.

[15]Publishers, of course, had been offering "circulation" figures based on the number of copies printed on an audited, industry-wide basis since the second decade of this century. This served to elevate certain advertising practices into standards; hence the call for more media information. The print equivalent of what broadcasters were after, however, is something more akin to "readership" tallies. These were not developed until the late

1930s, and then mostly in response to advances within broadcast audience research. Thus the print "audience" was also largely a hypothetical construct at the time. See Archibald M. Crossley, "The Early Days of Public Opinion Research," Public Opinion Quarterly 21 (1957):159.

[16]Cf. E. H. Felix, "Radio Advertisers Should Scan Field Strength Maps," A&S 16 (7 January 1931):32; "Here's a Way to Count the Listeners to Any Station," BA 4 (November 1931):18; "Potential Market for More Radio Accounts," Broadcasting 7 (15 September 1934):13.

[17]"Measuring the Radio Audience," BA 1 (September 1929):20. See also John Karol, "Using the Mail to Map Station 'Circulation'," Broadcasting 4 (15 May 1933):11; L. R. Ames, "Determining Radio Coverage," A&S 23 (24 May 1934):46.

[18]"The Development of Research in Broadcast Advertising," Journal of Marketing 2 (October 1937):141.

[19]See Henry C. Link, The New Psychology of Selling and Advertising (N.Y.: Macmillan, 1932); Howard E. Blood, "Comparative Research," Printer's Ink 172 (22 August 1935):37.

[20]See, e.g., Percival White's authoritative early text, Advertising Research (N.Y.: D. Appleton, 1927).

[21]"The Gallup Method of Advertising Research," A&S 18 (16 March 1932):30.

[22]G. W. Stamm, "Can Radio Circulations Be Calculated?" BA 1 (May 1929):3. Stamm's argument noted that mail returns were inadequate to this task, that the engineering aspects of radio were too complex and variable to be adequately measured, and that print advertisers knew better anyway and sought only some limited basis for comparison.

[23]The study itself was published by NBC in 1928 as "A Study of Radio Broadcasting." For a response to it, see L. Ames Brown, "Broadcast Advertising--Its Possibilities and Limitations," BA 1 (April 1929):23.

[24]The studies themselves were released by CBS from 1930 through 1933 under the title "A Study of Radio Network Popularity." For response to them, see Walter Mann, "Survey of Surveys," Sales Management 27 (15 August 1931): 227; E. H. Felix, "Radio for the Advertiser," A&S 18 (31 March 1932):49.

[25]See E. H. Felix, "Radio for the Advertiser," A&S 20 (22 December 1932): 44. For a partial list of the studies that followed, see E. P. J. Shurick, The First Quarter-Century of American Broadcasting (Kansas City: Midland, 1946), "Chronology of Milestones"; "Fifty Years: 1888-1938," Printer's Ink 184 (28 July 1938):section two.

[26]Many were "scientific" versions of early dealer polls or reinterpretations of data collected by the Census Bureau and Moody's Industrial Corp.--similar to so much marketing information today.

[27]See, e.g., Robert Riegel, "Listening Habits with Relation to Incomes," Broadcasting 3 (15 July 1932):11; "Metropolitan Radio Audiences," BA 5 (December 1932):15; "The Summer Radio Audience," BA 4 (January 1932):12.

[28]Measurement in Radio (Columbus, Ohio: Ohio State U. Press, 1934), p. v. Lumley's bibliography contains literally hundreds of references to broadcast research studies of the period, many of them unpublished and no longer available. See also his "Methods of Measuring Audience Reaction," BA 5 (October 1932):6; "Habits of Radio Audience Analyzed," Broadcasting 4 (1 February 1933):11.

[29]Idem., Measurement in Radio, p. 13.

[30]John Karol to William S. Hedges, 4 June 1964, Broadcast Pioneers Library, Washington, D.C.

[31](N.Y.: B.C. Forbes, 1930).

[32]See his "Taking the Blue Sky Out of the Air--Ten Years Later," A&S 32 (July 1939):25; Radio Audience Measurement (N.Y.: C.A.B., n.d.).

[33]"It's Time We Took the 'Blue Sky' Out of the Air," A&S 13 (16 October 1929):18, 66.

[34](N.Y.), p. 1.

[35]See the report itself, on file at the Broadcast Pioneers Library, as well as Archibald Crossley, "The Advertiser Looks at Radio--1930" in Advertising Research Foundation, Proceedings of the 9th Annual Conference (1963). Among the report's findings: 60 percent of set owners used their sets sometime during the evening hours each week; of these, 40 percent listened between 8-10 p.m., a figure which dropped during the summer months; 15-30 percent of owners could be counted on to tune in to any particular show consistently.

[36]R. B. Robertson, "ANA Survey Replete with Errors," BA 3 (April 1930):5.

[37]A few random copies of the C.A.B.'s reports are on file at the Broadcast Pioneers Library. They are summarized in Ten Years of Network Program Analysis (N.Y.: C.A.B., 1939). See also This Is Your New and Expanded C.A.B. (N.Y.: C.A.B., 1945).

[38]Quoted from Radio Broadcast (May 1928) in Michael R. Cheney, "What We Really Need from Audience Research and Analysis," PTR 8 (March/April 1980):26.

[39]This incident was reported later in Kenneth M. Goode, What About Radio? (N.Y.: Harper & Bros., 1937).

[40]Carl W. Harris, "How Big Is a Radio Audience?" BA 4 (February 1932):6.

[41]This discovery is captured as it was being made in the discussion found in Alfred N. Goldsmith and Austin C. Lescarboura, This Thing Called Broadcasting (N.Y.: Henry Holt, 1930).

[42]Author's interview with H. M. Beville, New York City, 9 January 1979. Mr. Beville made the point that program producers and talent did indeed resist these indices because they perceived them as developing out of the concerns of the buyers and sellers of broadcast time.